Lab 7 - Pseudocode

Friday, April 17, 2020 12:25 PM

Pseudocode design to implement functions

Initialization:

- Initialize timer		// used for delays
- Initialize LED ports		// for 8 LED module
- Initialize BTN ports		// BTN1-3 on MX7
- Initialize SPI Interface • Reset LCD Display		
- Initialize I2C Interface • Configure TMP3 module		
- Initialize UART Interface		

Operation:

// Ambient Temperature controls operational mode

Initialize Continuous loop

- Read ambient temperature and convert to °F
- | If ambient temperature is >= 80 °F | | // Overheated |
  - Flash message on LCD Display
  - Transmit message to terminal with CR and LF
  - Clear LEDs
  - Set overheat flag
- Else
  - Read buttons and convert to level 0..7
  - Delay for switch bounce
  - Set output LEDs corresponding to power level
  - Display temperature on LCD Display
  - Display temperature on Terminal - stay on same line